OUT61828

S E C R E T 220206Z CITE [redacted] 0493 1967 APR 22 02 29Z 25X1

[redacted] 25X1

SUBJ: EVALUATION OF 111B MATERIAL FROM MISSION HT 67-110

REF: [redacted] 25X1

1. MISSION HT 67-110, FLOWN ON 14 MARCH 1967, EMPLOYED A 111B (H) CAMERA SYSTEM IN THE U-2 AIRCRAFT. THE MATERIAL WAS PROCESSED IN THE FIELD. ALL PHOTOGRAPHY (LESS EDIT CLIPS) INCLUDING THE ORIGINAL NEGATIVE AND DUPE POSITIVE FROM THE MAIN CAMERA, AND THE TWO ORIGINAL NEGATIVES FROM THE TRACKERS WERE RECEIVED FOR EVALUATION AND ANALYSIS. INCLUDED WITH THE PHOTOGRAPHY WERE THE [redacted] 25X1 [redacted] DATA, SUN ANGLE DATA, ON/OFF TIMES, OBLIQUE ANGLES USED, THE MISSION DATA SHEET AND A MISSION PLOT OF BOTH THE FLIGHT TRACK AND PHOTOGRAPHIC COVERAGE. 25X1

24 APR 1967 7

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2. THE QUALITY OF THE 111B PHOTOGRAPHY IS CONSIDERED GOOD PROVIDING RESOLUTIONS OF APPROXIMATELY ONE FOOT IN THE NEAR VERTICAL PHOTOGRAPHY AND [redacted] 25X1 NO DOUBLE IMAGERY WAS DETECTED THROUGHOUT THE MISSION; HOWEVER, NO PHOTOGRAPHY WAS ATTEMPTED IN THE CRITICAL OBLIQUITIES WHERE THE DOUBLE IMAGERY USUALLY OCCURS (BETWEEN 40 AND 50 DEGREES). THERE ARE ISOLATED FRAMES CONTAINING FUZZY IMAGERY THAT OCCUR WHEN THE PILOT CHANGES THE AIM ANGLE. EXAMPLES OF THIS ANOMALY ARE:

Approved For Release

TIME	FRAME	AIM ANGLE (TENTHS OF DEGREES)
042029	1093	39.2R
042106	1170	25.5R
042553	1349	05.3R
042612	1365	16.9R
043146	1491	12.5R
043159	1501	24.8R
043224	1521	32.8R
043303	1552	06.2R
043417	1658	20.6L
043430	1668	15.0L
043444	1679	23.9L
043455	1687	26.1L
044243	1797	60.1L
044348	1849	60.8L

3. CERTAIN INFORMATION CONTAINED IN PARAGRAPH F OF THE [redacted] 25X1

[redacted] CABLE WAS IN ERROR. THE ITEMS NOTED WITH AN ASTERISK (') WERE 25X1

IN ERROR AND SHOULD READ AS FOLLOWS:

E 0403 2305N 11943'

F 0408 2331N 11930E'

I 0430 2512N 12120E MODE 5'

R 0532 2226N 12029E MODE 5'

U 0611 2430N' 12010E'

ALL ALTITUDES WERE IN ERROR. THE ENTIRE MISSION WAS FLOWN IN MODE 5. THE PLOT OF THE FLIGHT TRACK REFLECTS THE SAME ERRORS CONTAINED

IN THE [redacted] ALTHOUGH THE PHOTOGRAPHIC COVERAGE WAS ACCURATE. 25X1

4. THE PROCESSING SITE DID NOT COMPLY WITH THE TITLING INSTRUCTIONS PROMULGATED BY REFERENCE.

A. TEN POINT TYPE WAS USED.

B. THE DATE WAS NOT INCLUDED IN THE TITLING.

C. THE TITLED FRAME NUMBER AND THE COUNTER NUMBER ARE IDENTICAL ON THE SAME FRAME.

THE REFERENCE STATES THAT "THE FIRST FRAME OF IMAGERY SHOULD BE TITLED ØØØ1" AND "THE TITLED NUMBER WILL NOT CORRESPOND WITH THE DATA CHAMBER NUMBER."

5. THE OBLIQUE ANGLE INFORMATION AND THE TIME OF PHOTOGRAPHY ARE RECORDED ONE FRAME AHEAD OF THE ACTUAL PHOTOGRAPHY IN THIS CAMERA SYSTEM. IT IS IMPORTANT THAT THIS INFORMATION BE READILY AVAILABLE. DURING THE BREAKDOWN, THE PROCESSING SITE SHOULD RECORD THE DATA FROM THE LAST FRAME OF A CAN TO THE HEAD IDENT OF THE FOLLOWING CAN. WHEN FRAMES ARE REMOVED FROM THE MISSION (EDIT CLIPS) THE INFORMATION FROM THE LAST FRAME OF THE MATERIAL REMOVED SHOULD BE RECORDED ON THE TARGET (CLEAR FILM) THAT IS INSERTED WHERE THE FRAMES ARE REMOVED. IN MISSION HT 67-11Ø THIS INFORMATION WAS RECORDED ON THE TARGET INSERTS AND ON THE HEAD IDENT OF PART 1 ONLY. THE TIME OF PHOTOGRAPHY WAS RECORDED IN ERROR IN BOTH INSTANCES.

6. MODE 5 WAS USED ON THIS ENTIRE MISSION. MODE 5 CONSISTS OF FOUR OBLIQUE ANGLES IN INCREMENTS OF 1.5 DEGREE ABOUT A PARTICULAR AIM ANGLE BETWEEN Ø DEGREE AND 7Ø DEGREES. IN THE FIRST 24ØØ

FRAMES OF THIS MISSION THERE WERE 65 CHANGES IN THE AIM ANGLE. THIS AVERAGES A CHANGE IN AIM ANGLE EVERY 52 SECONDS. THE FOLLOWING CORRELATION OF FRAME, TIME AND AIM ANGLE ARE BROUGHT TO YOUR ATTENTION:

FRAME	TIME	AIM ANGLE
1560	043312	04.8L
1658	043417	20.6L
1668	043430	15.0L
1669	043431	25.1L
1682	043448	30.9L
1689	043457	39.3L
1718	044103	67.9L
1797	044243	60.1L
1850	044350	68.3L
1887	044435	72.2L
2056	044807(CAM OFF)	66.2L
2057	045136(CAM ON)	67.0R
2149	045331	58.2R
2150	045332	44.6R
2151	045333	31.2R
2152	045335	17.2R
2153	045336	02.5R
2154	045337	12.8L
2155	045338	30.1L
2156	045340	53.9L

2157 045341 67.2L

2172 045400 63.7L

IT APPEARS THAT THE PILOT SHOULD HAVE BEEN IN STANDBY AS HE CHANGED TO SOME OF THESE AIM ANGLES OR THE [redacted] SHOULD REFLECT THAT HE IS CHANGING FROM LEFT OBLIQUE TO RIGHT OBLIQUES AND BACK TO LEFT OBLIQUES. THE MISSION DATA SHEET REFLECTS THE CAMERA OFF AT 044807 AND THE CAMERA ON AT 045136 BUT INDICATES THAT THE OBLIQUE ANGLE WAS AT 67.0 DEGREES LEFT UNTIL 051100. IT IS OBVIOUS THAT HE STARTED AT 67.0 DEGREES RIGHT, SWEPT THROUGH 0.0 DEGREE, AND CONTINUED TO 67.2 DEGREES LEFT. 25X1

7. TO EXPEDITE EXPLOITATION OF 111B MATERIAL THE FOLLOWING SUGGESTIONS SHOULD BE CONSIDERED:

A. PROVIDE AN ACCURATE [redacted] RECORDING 25X1

(1) TIME

(2) COORDINATES

(3) ALTITUDE

(4) CAMERA ON/OFF POINTS

(5) CAMERA MODE

(6) AIM ANGLE (APPROXIMATE DEGREES AND LEFT OR RIGHT)

B. FORWARD THE TRACKER MATERIAL ORIGINAL NEGATIVE OR DUPE POSITIVE TO [redacted] ASAP PRIOR TO THE SHIPMENT OF THE MISSION MATERIAL. 25X1

C. PROVIDE [redacted] WITH A TARGET LISTING BY COORDINATES OR COMOR TARGET NUMBER. 25X1

D. TITLE FILM IN COMPLIANCE WITH EXISTING INSTRUCTIONS.

E. LIMIT EACH PART TO APPROXIMATELY 300 FRAMES IF THIS LENGTH OF DUPE FILM IS ECONOMICALLY FEASIBLE.

F. WRITE THE DATA INFORMATION FROM THE LAST FRAME OF EACH PART ON THE HEAD IDENT OF THE FOLLOWING PART.

8. AN EVALUATION AND ANALYSIS OF THE TRACKER CAMERA WILL BE IN A SEPARATE CABLE.

S E C R E T

--END OF MESSAGE--